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Italiadomani

PIANO NAZIONALE  
DI RIPRESA E RESILIENZA



Centro Nazionale di Ricerca in HPC,  
Big Data and Quantum Computing



Centro Nazionale di Ricerca in HPC,  
Big Data and Quantum Computing

## WP2.5: Meeting 2/10/2024

WP5 Leader: Daniele Spiga (INFN – sez. Perugia) & Elvira Rossi (Università Federico II di Napoli)  
Contributors: INFN, UNIMIB, UNINA, ROMA1, UNITS, UNIBO, UNIPD, UNIFE

## Meetings and other news

Updates from the Meetings with Spoke Leads: <https://agenda.inf.n.it/category/1783/>

- ✓ 12 Sept: Trentaduesimo meeting WPLEaders
- ✓ 25 Jul: Trentunesimo meeting WPLEaders
- ✓ 10 Jul: Trentesimo meeting WPLEaders
- ✓ 27 Jun: Ventoinovesimo meeting WPLEaders
- ✓ 12 Jun: Ventottesimo meeting WPLEaders

Project extended 31/08/2025 → 31/12/2025

Open Calls: The open calls have “started”  
September 1st

### Events of the Centro Nazionale:

- Possible End of Year Meeting in Catania ⇒ date to be defined between 9-13 December

Annual meeting del Centro Nazionale di Ricerca in HPC, Big Data and Quantum Computing: **16-20 settembre 2024**,

<https://agenda.supercomputing-icsc.it/event/2/>

**Talk T. Boccali:**

<https://supercomputingxc.sharepoint.com/p:/s/ICSCComm/EX-UbZT5k01FrvVS09P7z8MBDrUWtg9jREILbqKG-4rs8Q?rttime=LLR2WVLi3Eg>

**Talk T. Diotalevi:**

[https://agenda.inf.n.it/event/43050/contributions/242430/attachments/125005/184203/Annual\\_Meeting\\_Diotalevi.pdf](https://agenda.inf.n.it/event/43050/contributions/242430/attachments/125005/184203/Annual_Meeting_Diotalevi.pdf)

Quasi interactive analysis of big data with high throughput

Tommaso Diotalevi

Auditorium Antonianum, Roma

12:00 - 12:15

## RAC resources

The resources arrived late, people equipped themselves in another ways  
Some projects are simply late (for example innovation grants)

The spoke leaders would like to understand if these are the only reasons or if there are also technical ones

Access to RAC resources in 2024 and a plan for usage in 2025 would be important

## WP5 role in the context of the ICSC resources exploitation

As WP5 within Spoke2 we don't have any flagship that we own.

WP5 provides technological support to scientific activities of the Spoke2

As such we (WP5) contribute to the flagship coming from WP1, 2, 3 and 6.

- In Particular there are 3 actives: 2 from WP2 and 1 from WP6

High rate analysis : From WP2 and well established (see where we are with next report from TommasoT.

Advanced Machine Learning: Flash Simulation and bleeding edge applications: Always from WP2

“Extended Computer Vision at high rate”: From WP6

# Advanced Machine Learning: Flash Simulation and bleeding edge applications

From the WP5 perspectives this is where we want to try the integration of the workload offloading model

- This should also be included in the high rate analysis platform

The value here is to support the use case in order to enable the access to the HPC Leonardo booster partition from a cloud platform

- Cloud platform is a already developed service that run on top of k8s
- We need/want to enable the k8s to offload to Cineca Leonardo via interLink

A key point: we agreed to use this as a pilot use case in order to test the Spoke0 early federation of INFN-CINECA computing providers.

- This is our first activity in collaboration / synergy with Spoke0

Last but not least: RAC resources are available. CINECA Allocation is available

## “Extended Computer Vision at high rate”

This use case (flagship) come from WP6 and technology wise is quite synergic with WP2

High Rate Analysis

- This simplify our life...

RAC Resources are available : details are here

[https://servicedesk.infn.it/servicedesk/customer/portal/50/INFN\\_CLOUD-1712](https://servicedesk.infn.it/servicedesk/customer/portal/50/INFN_CLOUD-1712)

ACTIONS:

- We should replicate the setup we have
- We should use this as opportunity to improve the deployment process

We kindly ask TommasoT to start getting access to the cloud resources and let us know if there is any issue.

## Discussion items

Things are moving (resource wise) and thus our role become a bit more active

- Read as: we need to provide support to “our user” if/when needed

Not only!

- We wanted to start discussing how to clean-up a bit what we did so far with service deployment and related integration.
- The ultimate goal is to provide spoke0 with something to be integrated in the general service portfolio
  - Technically this means that we want to provide spoke0 with something that can become a “button” in the dashboard
  - This translate into : we need to provide spoke0 with something that possibly can be integrated with TOSCA

In our opinion the best way so far is to provide a Flux based repo per each service

- Flux is something we already know
- It can be translated in anything will be needed with a low effort (i.e. ArgoCD? )
  - And this will depend from Spoke0 export.

**We (WP5) need to allocate some effort to cover these tasks! ... are there volunteers already**

?